New York State Department of Environmental Conservation
Division of Materials Management
Bureau of Pest Management
Product Registration & Pest Management Alternatives Section
625 Broadway, 9th Floor, Albany, New York 12233-7257
Phone: (518) 402-8768 • **Fax:** (518) 402-9024
E-Mail: ppr@gw.dec.state.ny.us
Website: www.dec.ny.gov

Joe Martens
Commissioner

April 4, 2013

VIA E-MAIL

Ms Tawanda Maignan, Team Leader
Risk Integration, Minor Use, and Emergency Response Branch
U.S. EPA Office of Pesticide Programs (7505P)
Document Processing Desk (EMEX)
Room S 4900, One Potomac Yard
2777 Crystal Drive
Arlington, Virginia 22202

Dear Ms. Maignan,

Re: Specific Exemption Request for Use of Brigade WSP (EPA Reg No. 279-3108), Bifenture EC Agricultural Insecticide (EPA Reg. No. 70506-57) and Bifenture 10DF Insecticide/Miticide (EPA Reg No. 70506-227) all of Which Contain the Active Ingredient Bifenthrin, to Control Brown Marmorated Stink Bug (*Halyomorpha halys*) on Apples in New York State During 2013

The New York State Department of Environmental Conservation, as the State lead agency for pesticide matters, hereby requests approval of the referenced application (see enclosure) under Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. The enclosed application includes the information required in 40 CFR, Part 166, Subpart B (166.20).

This is the first year that we are requesting bifenthrin (Brigade WSP EPA Reg. No. 279-3108, Bifenture 10DF EPA Reg. No, 70506-227, and Bifenture EC EPA Reg. No. 70506-57) for emergency use to control brown marmorated stink bug (BMSB) in Ulster, Orange, and Dutchess Counties of New York State.

Apples are grown on 42,000 acres in New York, with an estimated combined annual value of more than $227 million. New York State is the second largest producer of apples in the United States. The leading fruit producing counties in the state are Wayne, Orleans, Ulster, Clinton, Niagara, and Columbia.

BMSB has been observed in the urban and agricultural environs of New York State since 2007. In 2012, observations and reports of commercial tree fruit injury in the Hudson Valley elevated the importance of this insect from a nuisance problem to one of agricultural pest status in New York State. Severe feeding injury to commercial apples was observed in the field through fruit surveys and in pack-out evaluations on two farm sites in Ulster and Orange Counties in 2012. Red Delicious, Pink Lady and Golden Delicious varieties were documented with severe late season stink bug feeding injury, resulting in losses exceeding 21% on farms in Campbell Hall and Milton, NY. Field evaluations of fruit on the tree, in field run bins and in pack-out studies were made to determine the extent of fruit losses (please refer to the attachment "Fruit Injury Summary from the Invasive Brown Marmorated Stink Bug" for packout evaluation details).

The addition of the three insecticides requested (Brigade WSP, Bifenture 10DF, and BifentureEC) would be beneficial for New York growers because it would provide additional products containing an effective active ingredient for growers to use in the management of BMSB.

The New York State Department of Environmental Conservation (Department) is requesting use of these products only in the three counties in the Hudson Valley where fruit damage is anticipated to be most likely in 2013: Ulster, Orange, and Dutchess Counties, comprising a total of 5,974 acres of apples.

The above mentioned bifenthrin products would be used from July 1, 2013 through November 1, 2013.

The Department does not anticipate any adverse effect on endangered species in the identified counties from the use of these products. The species of concern identified by the US Dept. of Fish and Wildlife in Ulster, Orange and Dutchess Counties are listed on the attachment "Endangered Species", and no Endangered Species Protection Bulletins have been issued by the EPA limiting pesticide use for these counties for June to Sept 2013. As with any emergency exemption registration, the use of these products will be monitored for evaluating any potential impact on endangered species.

Please contact me at (518) 402-8768, if you require further assistance on this request.

Sincerely,

Cyndi Crowley

Cyndi Crowley
Environmental Chemist
Product Registration &
Pest Management Alternatives Section

Enclosures

cc: w/ enc A. Enache USEPA Reg II

cc: w/o enc M. Helms, Cornell, PMEP
K. King, New York State Dept. Ag & Mkts

Summaries of Fruit Injury by the Invasive Brown Marmorated Stink Bug, *Halyomorpha halys* (Stål): (Pentatomidae), in the Hudson Valley of New York, 2012.

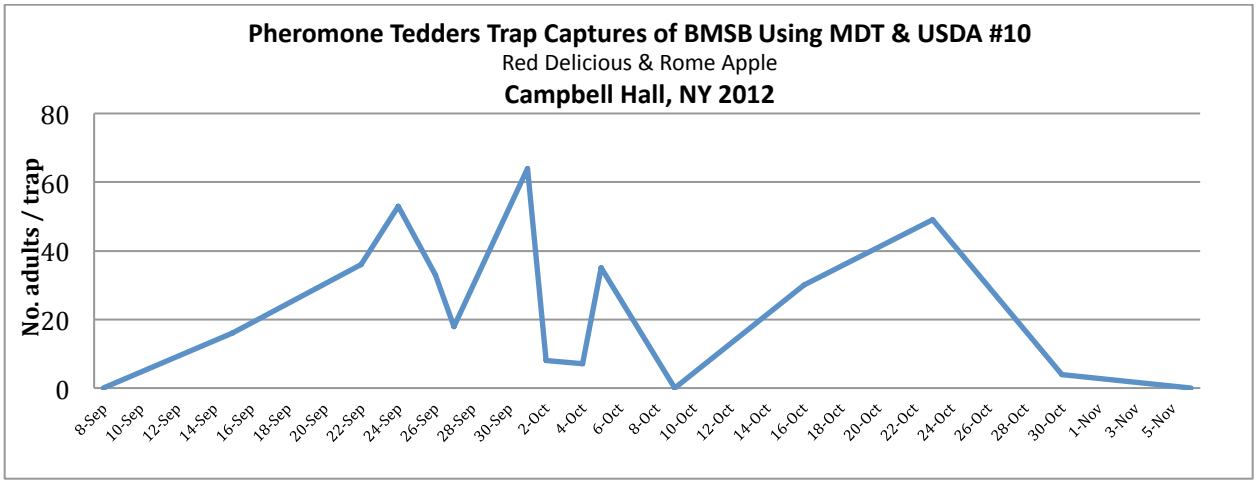
Summary: The brown marmorated stink bug (BMSB) has been observed in the urban and agricultural environs of New York State since 2007 (Conversations with R.E. Hoebeke). Observations and reports in 2012 of commercial tree fruit injury in the Hudson Valley have elevated the importance of this insect from a nuisance problem to one of agricultural pest status in New York State (Figure 1). Severe feeding injury to commercial apple was observed in the field through fruit surveys and in pack-out evaluations on two farm sites in Ulster and Orange Counties. Red Delicious, Pink Lady and Golden Delicious varieties were documented with severe late season stink bug feeding injury, resulting in losses exceeding 21% on farms in Campbell Hall and Milton, NY. Field evaluations of fruit on the tree, in field run bins and in pack-out studies were made to determine the extent of fruit losses.

Evaluations: The BMSB adult was first observed in Hudson Valley urban environments in 2008. Increasing numbers have been observed throughout the state with increasing observations along agricultural borders (http://hudsonvf.cce.cornell.edu). On the 27th of August 2012, in Campbell Hall, NY, BMSB adults were observed by commercial IPM scouts to be moving from the wooded edge to apple. Feeding injury becoming evident by Late August in Red Delicious and mid-late September in Pink Lady and Golden Delicious. IPM scouts, two farm managers and the farm owner, Jeff Crist of Crist Brothers Orchards, began to report to Cornell University's Hudson Valley Lab that BMSB had been observed in a number of their orchards. Responding to this development, pheromone traps and subsequent captures of the stink bug complex using pheromone captures beginning 8th of September until the first week of November documented the presence of BMSB along the edge and center of orchards in Campbell Hall and Milton NY (Graphs 1 & 2).

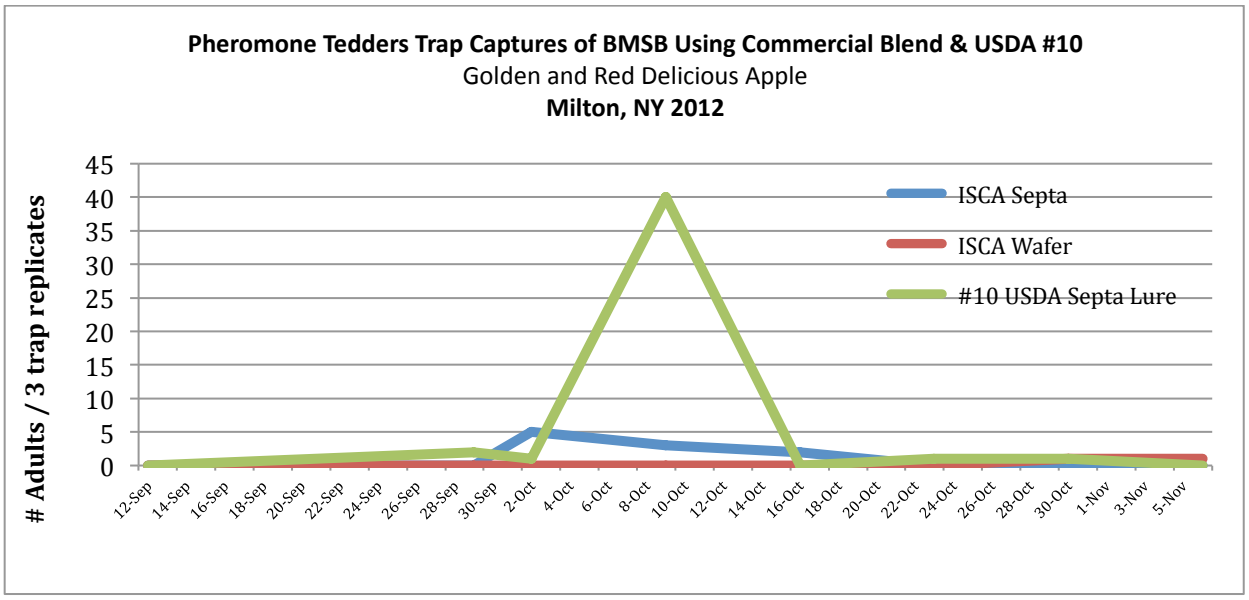
1. In our first evaluation of BMSB fruit injury, field-run Golden Delicious harvested into bins on the 5th of October in Milton, NY were evaluated to assess the extent of BMSB feeding injury (Image 1). From three representative bins, 1000 fruit were randomly selected and rated for BMSB feeding site injury. From the sampled fruit 24%, 54% and 68% feeding injury was observed, averaging 48.7% fruit loss.

2. In our second evaluation of BMSB fruit injury, field evaluations of 'Pink Lady' flanking BMSB pheromone traps were made on the 16th of October to assess the extent of BMSB feeding injury. Trees on M-9 rootstock in their 5th leaf, spaced within the row at 3' intervals, 11' drive rows, averaging 9.5' in height were assessed in 2 center rows and 2 border rows running North and South. Beginning along the wooded edge of the block, 100 fruit from 10 trees in 30' of row was assessed toward the center of the block with the number of fruit evaluated totaling 3600 fruit. Fruit was determined to be injured by stink bug if darkened depressions contained one or more feeding sites or 'holes' from the insertion of the insect rostrum or evidence of a 'feeding tube' in conjunction with corking, symptomatic of pentatomid feeding (Image 2). Fruit injury in this block averaged 21.4% loss.

3. In our third evaluation of BMSB fruit injury, pack-out evaluations of Red Delicious fruit were made at the Crist Brothers packing-house in Walden, NY on the 30th of October (Image 3). From 52 bins, 100,556 fruit were graded using GeoSort software in a Greefa sorting and packing line with iQS (intelligent quality sorter) for external imaging characteristics, allowing for detection of one square millimetre deviations. From this lot, 15 bins or 31,300 fruit damage was observed, comprising a 31.1% loss. Of these fruit, three representative bins were evaluated to determine the extent of which BMSB feeding was present, with 100 fruit evaluated from each bin. From these samples 97%, 90% and 93% of the fruit exhibited stink bug injury representing 29,212 fruit loss or 29.1% BMSB loss (Image 4 & 5).



Graph 1.

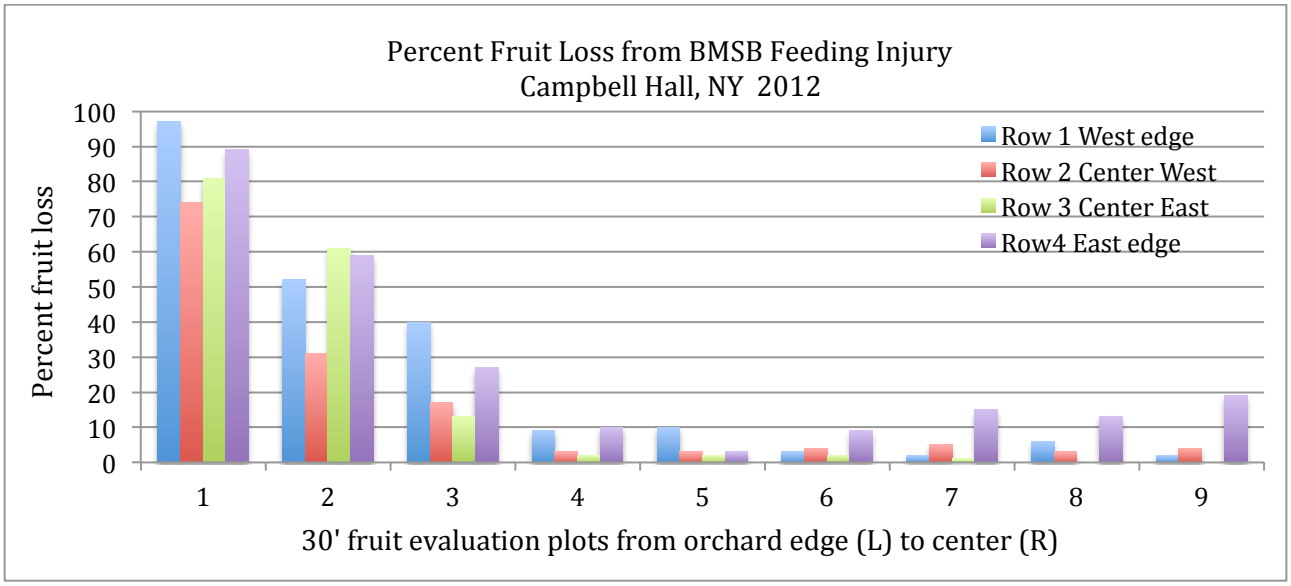


Graphs 2.

Graphs 1 & 2. Trap captures of the BMSB using Tedders Trap and pheromone along the edge and center of two Hudson Valley orchards. A total of 212 and 57 brown marmorated stink bug were captured using a single trap or replicated traps at the interior of mixed apple block orchards at Campbell Hall and Milton respectively, from 8 September to 5 November, 2012.

	Percent Fruit Loss from BMSB Feeding Injury					
Distance to edge	Row 1 West	Row 2 Center	Row 3 Center	Row4 East	Ave % fruit loss	Total % loss
0-30’	97	74	81	89	85.3	21.4
30-60’	52	31	61	59	50.8	
60-120’	40	17	13	27	24.3	
120-180’	9	3	2	10	6	
180-240’	10	3	2	3	4.5	
240-300’	3	4	2	9	4.5	
300-360’	2	5	1	15	5.8	
360-420’	6	3	0	13	5.5	
420-480’	2	4	0	19	6.3	

Table 1. Field evaluations on 16th of October, 2012 of ‘Pink Lady’ on M9 showing % fruit loss.



Graph 3. Field evaluations on 16th of October, 2012 of 'Pink Lady' on M9 showing a distinct 'edge effect'.

Image 1. Corking beneath the skin (L) and darkened depressions with rostrum feeing sites 'holes' and feeding tubes within darkened depressions (R) are symptomatic of pentatomid pome fruit feeding.

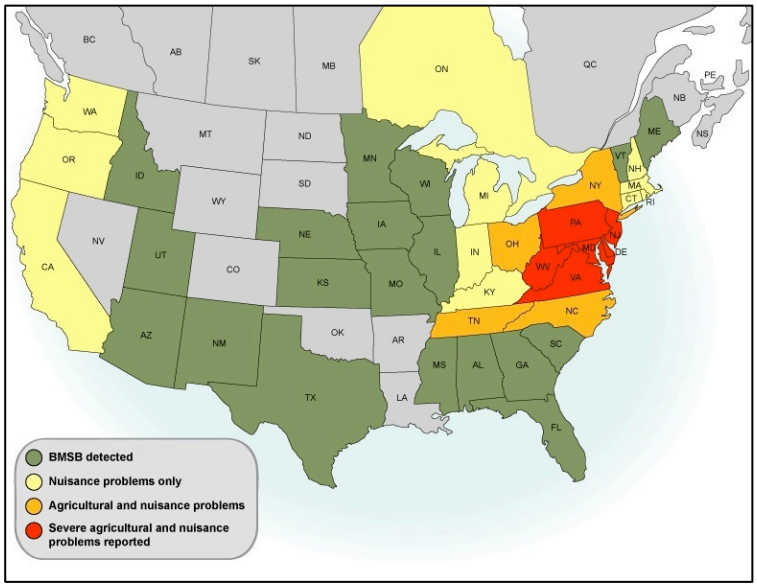


Figure 1. Mapping of detection in urban and agricultural locations including severe injury inflicted on agriculture (*Source: T. Leskey, USDA ARS);* Northeastern IPM Center web site national map of BMSB; 'Where are BMSB" (http://www.stopbmsb.org/where-is-bmsb/).


Image 1. Field-run Golden Delicious apple (L); BMSB fruit feeding injury (R).


Image 3. Evaluations of Red Delicious fruit at the Crist Brothers packing-house in Walden, NY

Earlier packout for Block T

Grower: Crist Bros. Orchards, Inc

Variety: Red Delicious Bins Emptied: 0

→ Date: 10/5/2012 Lot #: T 1-3

Packout 176 Bushel / bin:

Storage : Reg St Home Reg OR Bushel: 0

Comment:

PACKOUT REPORT

XF: :	330	56.1%	
XF/F :			
F :			
#1:	47	8.0%	} 44% downgraded
cider :	212	36.0%	}
Presort			

P Lot	Package	packed for	Units Packed	Bushel Equivalen	%	Packing Charge/Unit	Packing Charge	Note	P Lot Comment
17601	8/3 XF 2 1/2 RPC	CB	55	38.5	6.5%	$0.00	0		
17602	SS tote	JPS	292	292	49.5%	$0.00	0		
17604	2 1/4" 12/3 #1 Am S	JPS	8	8	1.4%	$0.00	0		
17605	138 #1 Tray	JPS	1	1	0.2%	$0.00	0		
17606	125 #1 Tray	JPS	4	4	0.7%	$0.00	0		
17607	100 #1 Tray	JPS	10	10	1.7%	$0.00	0		
17608	88 #1 Tray	JPS	8	8	1.4%	$0.00	0		
17609	80 #1 Tray	JPS	2	2	0.3%	$0.00	0		
17610	72 #1 Tray	JPS	6	6	1.0%	$0.00	0		
17611	64 #1 Tray	JPS	4	4	0.7%	$0.00	0		
17633	US 1 in bin	CB	0.2	4	0.7%	$0.00	0		
17603	cider apples	cider	1.9	38	6.4%	$0.00	0	Cider removed packhouse	
17631	cider bins	cider	8.7	174	29.5%	$0.00	0	Cider removed by presort	
	Totals :		**400.8**	**589**			**0**		

Almost no fruit was electronically downgraded due to size or color, less than 1%. That means approximately 43% of downgrades were due to defects. There were very few defects other than stinkbug.

Image 4. Red Delicious pack-out report from Crist Brothers packing-house, Walden, NY

Grower: Crist Bros. Orchards, Inc

Variety: Red Delicious Bins Emptied: 0

Date: 10/30/2012 Lot #: T 1-3

Packout 217 Bushel / bin:

Storage : Reg St Home Reg OR Bushel: 0

Comment:

XF: : 1130 62.3% PACKOUT REPORT

XF/F :

F :

#1: 200 11.0%

cider : 486 26.7%

Presort

37.7% downgraded

P Lot	Package	packed for	Units Packed	Bushel Equivalen	%	Packing Charge/Unit	Packing Charge	Note	P Lot Comment
21701	8/3 XF 2 1/2 RPC	NYAS	275	192.5	10.6%	$0.00	0		
21702	5/5 XF 2 1/2 RPC	NYAS	600	420	23.1%	$0.00	0		
21703	Costco 4/10	NYAS	267	267	14.7%	$0.00	0		
21705	55 RPC	NYAS	50	35	1.9%	$0.00	0		
21704	60 RPC	NYAS	270	189	10.4%	$0.00	0		
21706	163 YK XF TP	JPS	33	29.7	1.6%	$0.00	0		
21708	2 1/4" 12/3 #1 Am S	JPS	11	11	0.6%	$0.00	0		
21709	138 #1 Tray	JPS	9	9	0.5%	$0.00	0		
21710	125 #1 Tray	JPS	24	24	1.3%	$0.00	0		
21711	100 #1 Tray	JPS	48	48	2.6%	$0.00	0		
21712	88 #1 Tray	JPS	50	50	2.7%	$0.00	0		
21713	80 #1 Tray	JPS	7	7	0.4%	$0.00	0		
21714	72 #1 Tray	JPS	41	41	2.3%	$0.00	0		
21733	US 1 in bin	CB	0.5	10	0.5%	$0.00	0	All due to defects (Bin on end by round table)	
21707	cider bins	cider	4.3	86	4.7%	$0.00	0	Cider removed packhouse	
21731	cider bins	cider	20	400	22.0%	$0.00	0	Cider removed presort	
		Totals :	1709.8	1819			0		

Less than 1% of cider was removed due to small size. (by weight)
No cider apples were generated due to color.
3364 lbs were separated by the machine for poor color on the commit to pack and sent to US#1. 3364 / 72,680 total lbs = 5% of US#1 was for color
Remaing 6% of US#1 would be defects by assumption.
Out of 37.7% downgraded, less 1% size, less 6% color = 30% downgraded due to defects. As there were few other defects than stinkbug, most of the 30 could be stinkbug.

Image 5. Red Delicious pack-out report from Crist Brothers packing-house, Walden, NY

Crist Brothers, a multigenerational farm family, owns and operates 6 commercial apple farms on 600-acres in 2 counties in the mid-Hudson Valley. Their packing line, Greefa produced in Holland features weight, size, color and external defect sorting. It takes up to 72 pictures per apple, factors in rotation and electronically sorts for defects, improving efficiency. The packout data in the report was generated from fruit defects identified from the Greefa sorting unit with further definition from sub-sampling of fruit by HVL entomology staff.

Reported by Peter J. Jentsch

Senior Extension Associate – Entomology, Department of Entomology
Cornell University's Hudson Valley Lab
P.O. Box 727, 3357 Rt. 9W
Highland, NY 12528

Office: 845-691-7151
Cell: 845-417-7465
FAX: 845-691-2719

E-mail: pjj5@cornell.edu
http://hudsonvf.cce.cornell.edu/bmsb1.html
http://web.entomology.cornell.edu/jentsch/links.html

Endangered/Threatened Species in Dutchess, Orange, and Ulster Counties, NY (from US Fish and Wildlife Service (http://ecos.fws.gov/tess_public/) - accessed 4/2/2013)

Dutchess County NY

Group	Name	Status
Clams	Dwarf wedgemussel (*Alasmidonta heterodon*)	Endangered
Mammals	Indiana bat (*Myotis sodalis*)	Endangered
Mammals	New England cottontail rabbit (*Sylvilagus transitionalis*)	Candidate
Reptiles	Bog (=Muhlenberg) turtle (*Clemmys muhlenbergii*)	Threatened

Orange County NY

Group	Name	Status
Clams	Dwarf wedgemussel (*Alasmidonta heterodon)*	Endangered
Flowering Plants	Small whorled pogonia (*Isotria medeoloides*)	Threatened
Mammals	Indiana bat (*Myotis sodalis*)	Endangered
Reptiles	Bog (=Muhlenberg) turtle (*Clemmys muhlenbergii*)	Threatened

Ulster County NY

Group	Name	Status
Flowering Plants	Northern wild monkshood (*Aconitum noveboracense)*	Threatened
Mammals	Indiana bat (*Myotis sodalis*)	Endangered
Reptiles	Bog (=Muhlenberg) turtle (*Clemmys muhlenbergii*)	Threatened

Endangered Species Protection Bulletins for Dutchess, Orange, and Ulster Counties, NY for the period of June to September 2013 (available from US EPA (http://www.epa.gov/oppfead1/endanger/bulletins.htm) - accessed 4/2/2013)

There are no pesticide use limitations in place for these counties and months beyond what may be listed on the pesticide label.

Cornell University
College of Agriculture
and Life Sciences

Arthur M. Agnello
Professor, Extension Fruit Entomology
Dept. of Entomology
N.Y.S. Agric. Expt. Station
630 W. North St.
Geneva, NY 14456-1371
Telephone: 315-787-2341
Fax: 315-787-2326
email: ama4@cornell.edu

1 April 2013

Ms. Cynthia Crowley
Environmental Chemist
Product Registration & Pest Management Alternatives Section
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7257

Re: Brown Marmorated Stink Bug - Section 18 Emergency Exemption

Dear Ms. Crowley:

I am writing this letter to express my support for your request to the EPA to approve an emergency exemption for the use of insecticides containing the active ingredient bifenthrin to control brown marmorated stink bug (BMSB) on apples in New York. As you are aware, apples are grown on 42,000 acres in New York, with an estimated combined annual value of more than $227 million (p. 16, USDA Noncitrus Fruits and Nuts, 2011 Preliminary Summary, National Agricultural Statistics Service, March 2012). In the United States, New York is the second (2) largest producer of apples. The leading fruit producing counties in the state are Wayne, Orleans, Ulster, Clinton, Niagara, and Columbia.

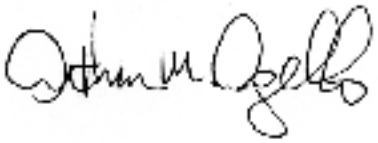
BMSB has been observed in the urban and agricultural environs of New York State since 2007. In 2012, observations and reports of commercial tree fruit injury in the Hudson Valley elevated the importance of this insect from a nuisance problem to one of agricultural pest status in New York State. Severe feeding injury to commercial apples was observed in the field through fruit surveys and in pack-out evaluations on two farm sites in Ulster and Orange Counties in 2012. Red Delicious, Pink Lady and Golden Delicious varieties were documented with severe late season stink bug feeding injury, resulting in losses exceeding 21% on farms in Campbell Hall and Milton, NY. Field evaluations of fruit on the tree, in field run bins and in pack-out studies were made to determine the extent of fruit losses (please refer to the attachment "Fruit Injury Summary from the Invasive Brown marmorated Stink Bug" for packout evaluation details).

The addition of the three insecticides requested (Brigade WSP, Bifenture 10DF, and Bifenture EC) would be beneficial for New York growers because it would provide additional products containing an effective active ingredient for growers to use in the management of BMSB. We are requesting use of these products only in the three counties in the Hudson Valley where fruit damage is anticipated to be most likely in 2013: Ulster, Orange, and Dutchess Counties, comprising a total of 5,974 acres of apples. The expected period of use would be from mid-season (July 1) through harvest (Nov 1).

We do not anticipate any adverse effect on endangered species in the identified counties from the use of these products. The species of concern identified by the US Dept. of Fish and Wildlife in Ulster, Orange and Dutchess Counties are listed on the attachment "Endangered Species", and no Endangered Species Protection Bulletins have been issued by the EPA limiting pesticide use for these counties for June to Sept 2013. As with any emergency exemption registration, the use of these products will be monitored for evaluating any potential impact on endangered species.

Thank you for your efforts and attention to this matter. Please feel free to contact me if I can be of any further assistance.

Sincerely,



Arthur M. Agnello
Professor and Extension Tree Fruit Entomologist

FMC Agricultural Products

FMC Corporation
1735 Market Street
Philadelphia, PA 19103

215.299.6000 phone
215.299.6468 fax
www.fmc.com

April 2, 2013

Mike Helms
Pesticide Management Education Program (PMEP)
Cornell University
5140 Comstock Hall
Ithaca, NY 14853-2601

RE: Section 18 Letter of Support

Dear Mr. Helms:

As the registrant for Brigade WSB Insecticide/Miticide (EPA Reg. No. 279-3108), FMC fully supports the proposed Section 18 emergency exemption use of the product in New York on apples to control the Brown Marmorated Stink Bug (*Halyomorpha halys*).

FMC is committed to working with IR-4 in their program to obtain Section 3 registrations for use of bifenthrin on pome and stone fruits. IR-4 has field magnitude of the residue trials scheduled to begin this year.

Please contact me by telephone at 215-299-6717 or by email at tim.formella@fmc.com if you have any questions on this matter.

Sincerely,

Timothy M. Formella

Timothy M. Formella
Senior Product Registration Manager
FMC Corporation

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certificate

Brigade® WSB
Insecticide/Miticide

Section 18 EXEMPTION

FOR DISTRIBUTION AND USE ONLY IN DUTCHESS, ORANGE, AND ULSTER COUNTIES IN NEW YORK STATE

EMERGENCY CALLS: 800-331-3148

ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE REGISTERED PRODUCT LABEL FOR BRIGADE WSB (EPA REG. NO. 279-3108) ARE TO BE FOLLOWED

THESE DIRECTIONS FOR USE MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

This exemption is effective from _____ through _____

Crop	Pest Controlled	Rate of Application
Apples	Brown Marmorated Stink Bug	12.8 - 32 fl oz/A (0.08 - 0.2 lb ai/acre)

Directions for Use: Application must be made post-bloom, by ground only as a dilute (minimum 200 gallons of finished spray per acre) or concentrate (minimum 50 gallons of finished spray per acre) in sufficient water to provide thorough coverage. Do not apply this product until after petal fall.

Restrictions: Do not apply more than 32 fl oz/acre (0.2 lb ai/acre) per application. Do not apply more than 72 fl oz/A (0.5 lb ai/acre) per year. Do not make applications less than 30 days apart. Do not graze livestock in treated areas. Do not apply within 14 days of harvest. Do not allow entry into treated areas for 12 hours following application.

Any adverse effects resulting from the use of Brigade WSB under this emergency exemption must be immediately reported to the New York State Department of Environmental Conservation.

FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103

United Phosphorus, Inc.
Sherry B. Hutcheson
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
Phone: (229) 247-9041
Fax: (229) 241-9699

Mike Helms
Extension Support Specialist
Pesticide management Education Program (PMEP)
Cornell University
5140 Comstock Hall
Ithaca, NY 14853-2601

RE: Section 18 Letter of Support for Bifenture EC and Bifenture 10DF Insecticides

Dear Mr. Helms,

United Phosphorus, Inc. (UPI) fully supports the Section 18 emergency exemption for use of Bifenture EC and Bifenture 10DF Insecticides, containing the active ingredient bifenthrin for control of Brown Marmorated Stink Bug (*Halyomorpha halys*) on apples in the following New York counties: Dutchess, Orange and Ulster, (and other supporting States). The products we supply are:

- Bifenture EC – EPA Reg. No. 70506-57
- Bifenture 10DF – EPA Reg. No. 70506-227

UPI will be able to supply product to meet the market demand for 2013.

If you have any questions, please feel free to contact me directly at 229-247-9041 or sherry.hutcheson@uniphos.com. If you have technical questions about the product and control of BMSB, please contact Tony Estes at 864-202-7526 or tony.estes@uniphos.com.

Thank you for your time and consideration.

Best regards,

Sherry B. Hutcheson
Regulatory Affairs Manager

Cc Tony Estes

For distribution and use only in the following counties within New York: Dutchess, Orange and Ulster under an emergency exemption authorized under Section 18 of FIFRA

All applicable directions, restrictions, and precautions on the EPA registered product label as well as those on these directions for use must be followed. These directions for use must be in the possession of the user at the time of pesticide application.

Product: Bifenture® 10DF Insecticide/Miticide (EPA Reg. No. 70506-227)

Firm Name: United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Crop/Site/Commodity: Apples

File Symbol: **xxxxxxxxxxxx**

Target Pest/Problem: Brown Marmorated Stink Bug (*Halyomorpha halys*)

Dosage: Apply 12.8 – 32.0 ozs (0.08-0.20 lbs ai) per acre of **Bifenture 10DF Insecticide/Miticide** (EPA Reg. No. 70506-227)
Use higher rates under heavy insect pressure.

Dilution Rate: **By Ground Only:** Apply as a dilute spray (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre).
For best control, thorough coverage is necessary.

Frequency/Timing of Applications: Applications should be applied when populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.
Do not apply more than 80 ozs (0.50 lbs ai) of **Bifenture 10DF Insecticide/Miticide** per acre per season.
For all Bifenthrin products used, do not apply more than a total of 0.50 lbs ai/acre per season.
Apply as necessary to maintain control using a minimum of 30-day spray intervals.
Do not apply this product until after petal fall.
Do not graze livestock in treated orchards or cut treated cover crops for feed.

Restricted Entry Interval (REI): 12 hours

Pre-Harvest Interval (PHI): 14 days

Restricted Use Pesticide: When used in New York, applications can only be made by certified applicators or by persons under their direct supervision and only for those uses covered by the certified applicators certification.

This exemption is effective xxxx, 2013 through xxxxx, 2013.

For distribution and use only in the following counties within New York: Dutchess, Orange and Ulster under an emergency exemption authorized under Section 18 of FIFRA

All applicable directions, restrictions, and precautions on the EPA registered product label as well as those on these directions for use must be followed. These directions for use must be in the possession of the user at the time of pesticide application.

Product: Bifenture® EC Agricultural Insecticide (EPA Reg. No. 70506-57)

Firm Name: United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Crop/Site/Commodity: Apples

File Symbol: **xxxxxxxxxxxx**

Target Pest/Problem: Brown Marmorated Stink Bug (*Halyomorpha halys*)

Dosage: Apply 5.12 – 12.8 fl ozs (0.08-0.20 lbs ai) per acre of **Bifenture EC Agricultural Insecticide** (EPA Reg. No. 70506-57). Use higher rates under heavy insect pressure.

Dilution Rate: **By Ground Only:** Apply as a dilute spray (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre).
For best control, thorough coverage is necessary.

Frequency/Timing of Applications: Applications should be applied when populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.
Do not apply more than 32 fl ozs (0.50 lbs ai) of **Bifenture EC Agricultural Insecticide**
For all Bifenthrin products used, do not apply more than a total of 0.50 lbs ai/acre per season.
Apply as necessary to maintain control using a minimum of 30-day spray intervals.
Do not apply this product until after petal fall.
Do not graze livestock in treated orchards or cut treated cover crops for feed.

Restricted Entry Interval (REI): 12 hours

Pre-Harvest Interval (PHI): 14 days

Restricted Use Pesticide: When used in New York, applications can only be made by certified applicators or by persons under their direct supervision and only for those uses covered by the certified applicators certification.

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